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# PART Env-Ws 374 DESIGN STANDARDS FOR LARGE PUBLIC WATER SYSTEMS

# Env-Ws 374.01 Adoption by Reference.

- (a) Except as otherwise required by these rules, treatment, distribution, and storage components and all other appurtenances of all public water systems serving over 1,000 people and those providing fire protection by means of street hydrants shall be designed in accordance with the practices and standards set forth in the 2003 edition of "Recommended Standards for Water Works," committee report of the Great Lakes Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers with the following exceptions:
  - (1) The forward;
  - (2) The policy statements; and
  - (3) The following sections related to well construction methods:
    - a. Section 3.2.6.2 d; and
    - b. Section 3.2.6.6.
- (b) Treatment criteria for surface water filtration shall be as specified in Env-Ws 380. Treatment criteria for corrosion control shall be as specified in Env-Ws 381.
- (c) Site selection, yield and drawdown testing, and source water protection for wells for community water systems and water quality for new wells shall be as specified in Env-Ws 378 or Env-Ws 379.
- (d) Standards for well abandonment shall be as specified in We 600 as adopted by the New Hampshire water well board.
- (e) Standards for submersible pumps shall be as specified in We 600 as adopted by the New Hampshire water well board.
- (f) Standards for installation, maintenance, repair, or replacement of pumps shall be as specified in We 700 as adopted by the New Hampshire water well board.
- (g) Standby power shall be required except in cases where there is an adequate alternate backup supply of water meeting minimum pressure requirements.
- (h) The total developed groundwater source capacity shall equal or exceed the design maximum day demand and equal or exceed the design average day demand with the largest producing well out of service.

Source. #8478, eff 11-30-05 (formerly Env-Ws 375.01)

Env-Ws 374.02 <u>Submission of Construction Proposals</u>. Any person proposing to supply water for domestic uses as a public water system as defined in RSA 485:1-a, XV shall not construct any new system or enlarge any existing system without first submitting detailed plans of the proposed construction to the department and securing its approval in accordance with Env-Ws 370, Env-Ws 372, or Env-Ws 374, as applicable.

Source. #8478, eff 11-30-05 (formerly Env-Ws 375.02)

# Env-Ws 374.03 Proposals for Chemical Additive(s).

- (a) No chemical shall be introduced into a public water system without the specific written approval of the department obtained pursuant to this section.
- (b) A proposal to add one or more chemicals to a public water system shall be submitted to the department in writing, accompanied by:

- (1) A report prepared in accordance with Env-Ws 374.04; and
- (2) A proposed plan for the treatment program prepared in accordance with Env-Ws 374.05.
- (c) A proposal to add one or more chemicals to a public water system shall be consistent with the design and testing criteria specified in Env-Ws 374.06 and the safety criteria specified in Env-Ws 374.07.

Source. #8478, eff 11-30-05 (formerly Env-Ws 375.03)

Env-Ws 374.04 <u>Report for Chemical Additive(s) Proposal</u>. The report required pursuant to Env-Ws 374.03(b)(1) shall include:

- (a) The name and concentration of each chemical proposed to be used;
- (b) A description of the equipment proposed to be used to add the chemical(s) to the water, including as applicable:
  - (1) The name of the manufacturer;
  - (2) The manufacturer's model number; and
  - (3) The upper and lower dose limits of the equipment;
  - (c) The present concentration of that chemical in the water supply, if any;
- (d) The testing protocol for daily determination of that chemical content of the raw and treated water, including:
  - (1) The location of all sampling points; and
  - (2) The tests that will be run on the samples; and
  - (e) A description of the safety equipment available for protection of operators.

Source. #8478, eff 11-30-05

Env-Ws 374.05 <u>Plan for Chemical Additive(s) Proposal</u>. The plan required pursuant to Env-Ws 373.03(b)(2) shall include:

- (a) Engineering plans for the installation of the equipment;
- (b) The location of the equipment in relation to other equipment; and
- (c) The point in the treatment process where the chemical(s) will be applied.

Source. #8478, eff 11-30-05

Env-Ws 374.06 <u>Design and Testing Criteria for Chemical Additive(s) Proposal.</u>

- (a) Design and testing criteria for chemical additive(s) proposals shall be as specified in this section.
- (b) The chemical(s) shall be applied under positive pressure conditions.
- (c) Equipment shall be protected from siphon action with an approved anti-siphon device.
- (d) A sampling point shall be provided that is at least 75 feet downstream of the point of injection and piped back to the injection station.

- (e) Samples shall also be taken at locations throughout the distribution systems, as specified in the testing protocol submitted pursuant to Env-Ws 373.04(e).
- (f) In addition to tests performed by the operator, samples from the system shall be submitted to the state laboratory as required by the department pursuant to Env-Ws 300.
  - (g) Daily records of testing and dosage shall be:
    - (1) Maintained as specified by the department pursuant to Env-Ws 300; and
    - (2) Submitted to the department on a monthly basis, no later than the 15th day of the month following the month for which the report is submitted.

Source. #8478, eff 11-30-05

Env-Ws 374.07 Safety Criteria for Chemical Additive(s) Proposal.

- (a) Safety criteria shall be as specified in this section.
- (b) Treatment systems that add a chemical on a continuous basis shall have at least 2 of the methods identified in (c), below, to prevent a chemical overfeed.
  - (c) The following methods to prevent chemical overfeed shall be acceptable:
    - (1) Connection of the electrical circuit of the chemical feed pump to the electrical circuit of the main water pump;
    - (2) Installation of a flow-measuring device with a common disconnect interfaced to the circuit powering the chemical feed pump;
    - (3) Installation of a continuous-reading analytical device for that particular chemical feed with a disconnect interfaced to the chemical feed pump; or
    - (4) Any other method for which there is an industry standard.

Source. #8478, eff 11-30-05

Env-Ws 374.08 <u>Inspection of Treatment Facilities</u>.

- (a) The department shall inspect treatment facilities at reasonable times.
- (b) The supplier of water shall, upon request of the department:
  - (1) Allow or provide access to all parts of the treatment facilities; and
  - (2) Furnish all information and records necessary to complete the inspection.

Source. #8478, eff 11-30-05 (formerly Env-Ws 375.04)

Env-Ws 374.09 <u>Quality of Products and Workmanship</u>. Where applicable, devices, products, and methods used in the installation, construction, and operation of treatment, distribution, and storage facilities and all other appurtenances to a public water system shall meet the specification criteria of the American Water Works Association, as required by Env-Ws 307.

Source. #8478, eff 11-30-05 (formerly Env-Ws 375.11)

PART Env-Ws 375 - RESERVED

Env-Ws 375.01 - Env-Ws 375.04

<u>Source.</u> (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; moved by #8478, eff 11-30-05 (see Env-Ws 374)

PART Env-Ws 376 - RESERVED

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; rpld by #8478, eff 11-30-05

PART Env-Ws 377 - RESERVED

<u>Source.</u> (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; rpld by #8478, eff 11-30-05

### **APPENDIX**

Rule Section(s)	State Statute(s) Implemented	Federal Statute(s)/ Regulation(s) Implemented
Env-Ws 374.01 - 374.09	RSA 485:3, I; RSA 485:8	